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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/024,746      | 12/19/2001  | Michael Hock         | 4680-00001          | 7652             |

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EXAMINER


STRIMBU, GREGORY J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3634

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |                                      |   |
|------------------------------|---------------------------------------|--------------------------------------|---|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/024,746  | <b>Applicant(s)</b><br>HOCK, MICHAEL |   |
|                              | <b>Examiner</b><br>Gregory J. Strimbu | <b>Art Unit</b><br>3634              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32-38 and 40-81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-38 and 40-81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, lateral impact protection element upwardly sloping from the hinge support to the lock support (claim 50) and the lateral impact protection element being horizontal from the hinge support to the lock support (claim 62) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 70 is objected to because "button" on line 3 is grammatically awkward and confusing. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

Claims 33-35 and 69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as "the alloy sheet" on line 2 render the claims indefinite because it is unclear which one of the plurality of alloy sheets set forth above the

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applicant is referring to. Recitations such as "the chambers" on line 2 of claim 69 render the claims indefinite because they lack antecedent basis.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32, 33, 36-38, 40-48, 51-60, 63-66 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gooding et al. in view of Widrig et al. and German Patent Publication No. 196 16 788. Gooding et al. discloses a lightweight door for motor vehicles comprising a supporting frame comprising a U-shaped portion comprising a hinge support 28 forming one U-limb, a lock support 30 forming the other U-limb and a door bottom (not numbered, but shown in figure 1) that interconnects the hinge support and the lock support, a lateral impact protection element 46 having first and second ends fixedly connected to the U-shaped profile, wherein the lateral impact protection element is a profile made from metal, and a window frame (not numbered, but shown in figure 1) made from metal, the window frame having first and second ends fixedly connected to the supporting frame, wherein the supporting frame is made in one piece as a stamped sheet, an outer skin 12, bracket reinforcement connection sheets 36 and 40, an window frame reinforcing part 34. Gooding et al. is silent concerning a light metal and inner and outer window gutter profiles.

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However, Widrig et al. discloses a vehicle door comprising an aluminum alloy, a welding connection means and a sloping side impact protection beam.

It would have been obvious to one of ordinary skill in the art to manufacture the door of Gooding et al. from an aluminum alloy, by welding and with an angled side impact protection beam, as taught by Widrig et al., to reduce the weight of the door and to increase the effectiveness of the side impact protection beam.

Additionally, German Patent Publication No. 196 16 788 discloses inner and outer window gutter profiles 6 which form an area shaped cross stay.

It would have been obvious to one of ordinary skill in the art to provide Gooding et al. with gutter profiles, as taught by German Patent Publication No. 196 16 788, to provide a sealing surface between the vehicle door and the window pane.

Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gooding et al. in view of Widrig et al. and German Patent Publication No. 196 16 788 as applied to claims 32, 33, 36-38, 40-48, 51-60, 63-66 and 68 above. Gooding et al., as modified above, is silent concerning the particular thickness of the sheet.

However, one of ordinary skill in the art is expected to routinely experiment with parameters so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the sheet of aluminum with a thickness of 1.2 to 1.8 mm.

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Claims 49, 50, 61, 62 and 70-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gooding et al. in view of Widrig et al. and German Patent Publication No. 196 16 788 as applied to claims 32, 33, 36-38, 40-48, 51-60, 63-66 and 68 above, and further in view of Cho. Cho discloses an L-shaped reinforcement sheet 3.

It would have been obvious to one of ordinary skill in the art to provide Gooding et al., as modified above, with reinforcement sheets, as taught by Cho, to increase the strength of the door where needed.

Claims 67 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gooding et al. in view of Rashid et al. and German Patent Publication No. 196 16 788. Gooding et al. discloses a lightweight door for motor vehicles comprising a supporting frame comprising a U-shaped portion comprising a hinge support 28 forming one U-limb, a lock support 30 forming the other U-limb and a door bottom (not numbered, but shown in figure 1) that interconnects the hinge support and the lock support, a lateral impact protection element 46 having first and second ends fixedly connected to the U-shaped profile, wherein the lateral impact protection element is a profile made from metal, and a window frame (not numbered, but shown in figure 1) made from metal, the window frame having first and second ends fixedly connected to the supporting frame, wherein the supporting frame is made in one piece as a stamped sheet, an outer skin 12, bracket reinforcement connection sheets 36 and 40, an window frame reinforcing part 34. Gooding et al. is silent concerning a light metal and inner and outer window gutter profiles.

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However, Rashid et al. discloses a vehicle door comprising magnesium.

It would have been obvious to one of ordinary skill in the art to provide Gooding et al. with a magnesium construction, as taught by Rashid, to increase the rigidity of the door.

Additionally, German Patent Publication No. 196 16 788 discloses inner and outer window gutter profiles 6 which form an area shaped cross stay.

It would have been obvious to one of ordinary skill in the art to provide Gooding et al. with gutter profiles, as taught by German Patent Publication No. 196 16 788, to provide a sealing surface between the vehicle door and the window pane.

Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gooding et al. in view of Widrig et al., German Patent Publication No. 196 16 788 and Cho as applied to claims 49, 50, 61, 62 and 70-80 above, and further in view of Ohya et al. Ohya et al. discloses the use of adhesives to connect elements of a door together. See Column 4, lines 21-22.

It would have been obvious to one of ordinary skill in the art to provide Gooding et al., as modified above, with an adhesive connecting means, to increase the strength of the connection between the elements of the door.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fellner, Novoa et al. and Hellenkamp et al. are cited for disclosing a vehicle door made by deep drawing or pressing.

***Response to Arguments***

Applicant's arguments filed August 13, 2004 have been fully considered but they are moot in view of the new grounds of rejection. Additionally, the affidavit of Holly A. Sutherland has also been considered, but it is not persuasive in light of the new grounds of rejection.

***Conclusion***

**THIS ACTION IS NOT MADE FINAL.**

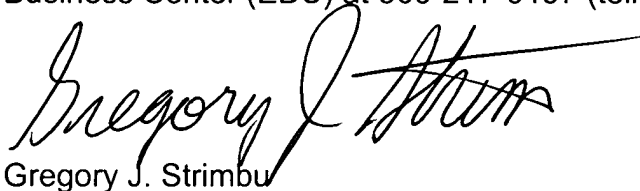
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 703-305-3979. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Gregory J. Strimbu", with a long horizontal flourish extending to the right.

Gregory J. Strimbu  
Primary Examiner  
Art Unit 3634  
September 17, 2004